



# UNIT SYSTEM

BARN  
EQUIPMENT



No. 81  
HANDY  
CATALOG

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From the collection of Alan O'Bright

# Star Sanitary Barn Equipment



**“Unit System”  
Stalls**



JULY, 1923

**Hunt, Helm, Ferris & Co.**

Harvard, Ill.

Albany, N. Y.

Los Angeles

San Francisco

Minneapolis

# **Hunt, Helm, Ferris & Co.**

## **H A R V A R D, I L L I N O I S**

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**Manufacturers for Thirty-seven Years  
of The STAR Line**

**Star Unit System Steel Stalls and  
Stanchions.**

**Star Steel Pens**

**Star Sanitary Water Bowls**

**Star Litter Carriers**

**Star Feed Carriers**

**Star Milk Can Carriers**

**Star Floor Feed Trucks**

**Star Steel Supporting Columns**

**Star Horse Stable Equipment**

**Star Hog Pen Equipment**

**Cork Brick**

**Barn Door Hangers**

**Garage Door Hangers**

**Harvester Hay Tools**

**Star Barn Door Latches**

**Star Stay Rollers**

**Star Hay Rack Fixtures**

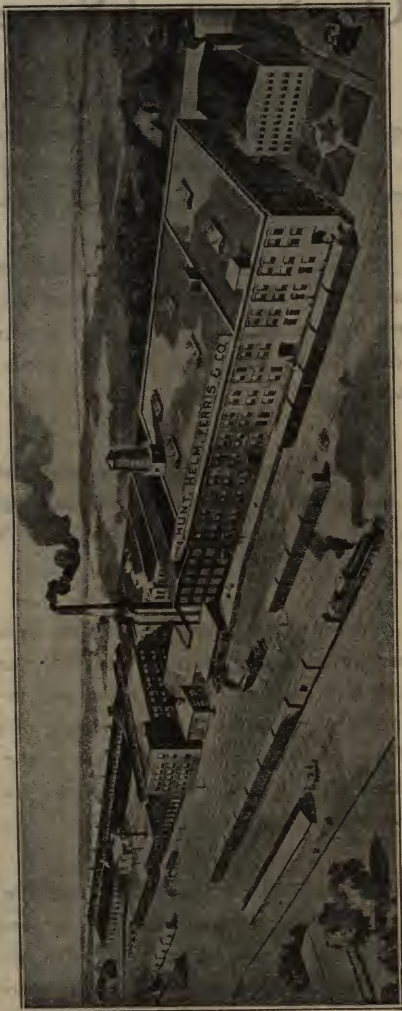
**Star Tank Heaters**

**Star Wire Stretchers and Heavy  
Hardware Specialties**

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**A large, 300-page book illustrating  
and describing the complete STAR  
Line may be had upon request.**

THE MAIN ESTABLISHMENT OF HUNT, HELM, FERRIS & CO.



THE SEVEN ACRE HOME OF STAR BARN EQUIPMENT

# One Secret of Success

The makers of Star Barn Equipment have been dairy farmers for years and everyone of us whose picture appears on the preceding page owns and operates practical dairy farms.

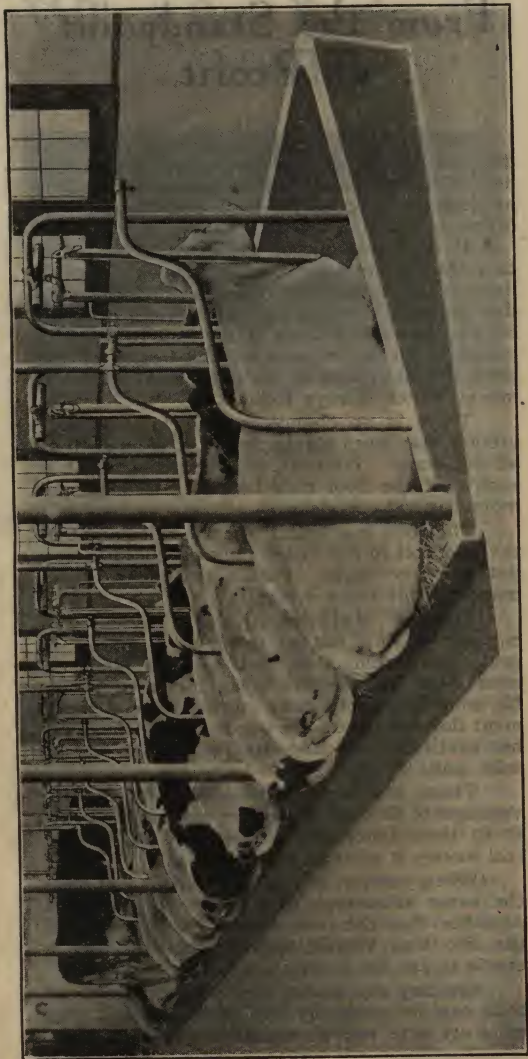
From our own experience we have learned what the needs of the dairy farmer are and every feature and part of Star Barn Equipment is designed to meet some of these needs in a practical way.

For this reason Star Barn Equipment stands for not only clean barns and clean, healthy cattle, but also for reduced labor and larger dairy profits.

Star Barn Equipment answers the demands of sanitation in every way; it insures the safety, health and comfort of your cows, and it pays for itself over and over in the saving of work and feed and in the actual increase in the production of milk, which always follows the improvement of barn conditions.

In Star Barn Equipment are combined all the practical worth-while features any equipment of this nature could have with simple, sturdy construction, which is a guarantee of strength and durability.





Interior View of One of Our Five Experimental Barns

# From the Standpoint of Profit

Other things being equal, the profits of dairying are determined largely by the cleanliness of the milk and by that same token milk is as clean as the cow, the barn and the methods of production.

\* It is almost out of the question to maintain the old style barn, equipped with wooden fixtures, in a sanitary condition. Germ-laden dirt hides in the corners and crevices of wood construction and is liable at any time to make its presence felt by inroads on the health of the herd, the cleanliness of the milk, and the loss of money which always follows.

There is no chance for anything to hide around Star Barn Equipment. It is as open as all out-doors. Its neat, simple arrangement is such that the floor may be easily cleaned and more easily kept clean.

The time is at hand when it will be out of the question to try to sell milk produced in any but sanitary barns. Public sentiment is demanding this more every day.

Practical dairymen want clean, well equipped barns, not so much as a matter of pride and satisfaction, but because increased cleanliness and comfort mean increased profit. No animal responds more quickly to good treatment than the cow. She unconsciously measures her gratitude and deposits her thanks in the milk pail.

Those keen enough to appreciate the advantages of this equipment are getting the benefit in time, labor and feed saved, and in the real money it adds to profits.

When you put in Star Equipment you have the same advantage over your old fashioned neighbor that the man with a binder has over the Rip Van Winkle farmer who still uses a cradle to cut his grain.

Sanitary equipment is the best investment that can be made by the dairy farmer. Results are sure and dividends large.



# Where Star Equipment is Built



In our factory, a glimpse of which is given above, the strictest economy is enforced. Waste is kept down to the minimum. Practically everything is done by machinery. Having the largest plant making barn equipment, we make these goods in such quantities that the cost of making is greatly reduced.

This is why we can give a finished product embodying costly, exclusive features at prices which are no greater than those of ordinary equipment and in some cases less.

Illustration above shows one view of our Drill Press room, where a number of operations are performed.

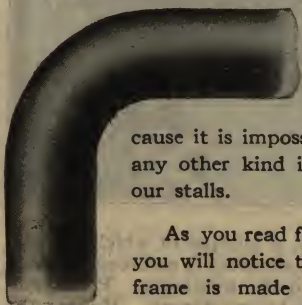
These machines work with wondrous power, shaping accurately and carefully the special parts of Giant Stanchions and Star Stalls, ends and sides of Litter Carrier Tubs, shaping Bales for Litter Carriers, Locks, Re-inforcing Bars, Trips and various other parts.

Every fixture, every little part, undergoes the closest inspection and scrutiny of experts. The slightest defect sends them to the scrap pile. The "Star" standard permits no defects.

You are cordially invited to visit our factory and visit this room and every other part of our six-acre plant. Find out how carefully Star Barn Equipment is built.

# How Star Equipment is Built

In the manufacture of Star Steel Stalls, the best grade of steel pipe is used. This is

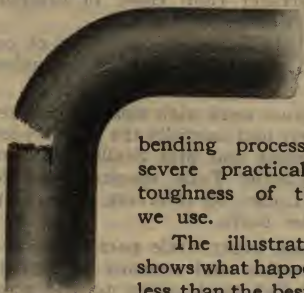


done, not merely because we believe in using first class material, but be-

cause it is impossible for us to use any other kind in connection with our stalls.

As you read further in the book you will notice that the Star stall frame is made of one piece of round steel pipe without any clamp irons, couplings or other dirt and dust catchers.

This piece of pipe acquires its shape by passing through a powerful bending machine. Every



piece of pipe we use has to be bent, and this

bending process constitutes a severe practical test of the toughness of the steel pipe we use.

The illustration at the left shows what happens to anything less than the best grade of pipe.

If, for the sake of lowering the cost and price of our equipment, we were tempted to use cheaper materials, as some do, we would be prevented from doing so from the very nature of the process explained above.

# Exclusive Star Features

Star Barn Equipment combines all the worth-while features and improvements known to dairy experts of the present day. It has a number of distinct advantages, the value of which shows up every day it is in use.

## STAR STALLS ARE EASY TO CLEAN AND TO KEEP CLEAN

Star Stall Arches are of one smooth, rounded piece of steel pipe. There are no malleable clamp irons or other dust catchers.

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## The Star Unit System Stall

"GROWS WITH YOUR HERD"—  
"ONE STALL OR A HUNDRED"

Star Stalls are built individually. You can get as few or as many as you need and add to them from time to time—your equipment growing and keeping pace with the natural increase of your herd.

Each stanchion is adjustable to the length of the animal stabled in it, whether it be a Jersey heifer or the biggest Holstein cow; and furthermore, being adjustable in width of neck space, no matter how your herd changes, STAR Equipment always fits, in both size and number.

The Star Adjustable Stall has three adjustments, all simple as one, two, three.

1. Raise a lever and move the stanchion backward or forward, as you please—an eleven-inch adjustment in length.

2. Loosen two set-screws and fit the stanchion to the cow's neck—it takes but an instant.

3. The Star Curb Clamp adjusts automatically to a curb of any height or width.

# EXCLUSIVE STAR FEATURES

(Continued)

## Long and Short Cows All Stand in Line



The easiest way to keep the cow clean is to keep the stall clean. If the cow stands right at the drop, the stall will be clean. But you can't always buy cows of even length. You can't get cows that fit your stalls. Fortunately you can buy Star Stalls, which can easily be adjusted to fit any cows.

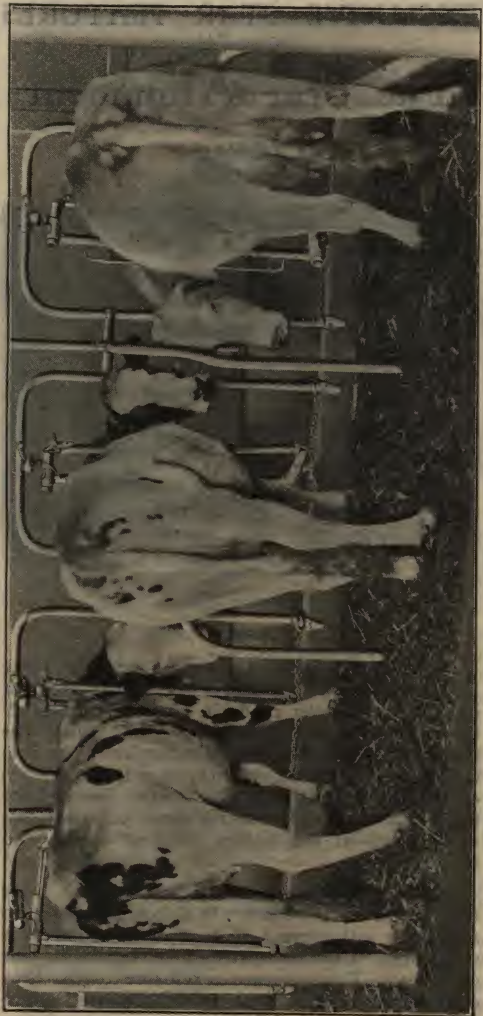
Many schemes have been devised to align the cows evenly at the drop.

The simplest of these adjustments requires the use of wrench and takes from five to ten minutes' time. Not only that, the adjustment must be made when the cow is not in the stall. To get the benefit of such an adjustment it would be necessary for each cow to enter the same stall each time. While this is done more or less in barns where the herds are looked after systematically, it must be remembered that even in such barns, the changing of cattle and the additions to the herds make numerous changes in alignment necessary.

Furthermore, alignment irons at the curb projecting back into the stall are dangerous and the cow is liable to serious injuries, such as abscessed brisket and bruised knees.

Only one safe, successful way of regulating the position of the cow with respect to the gutter has been discovered. You will find it in the STAR Alignment Device.

The STAR Alignment Device is as simple as it is practical—nothing complicated about it. Just raise a lever and move the stanchion backward or forward—an adjustment of eleven inches—and it is all done in an instant. No tools are required, no monkey wrench work is necessary. The adjustment is made instantly after the cow is in the stall.



Star Stalls Afford Plenty of Freedom



## EXCLUSIVE STAR FEATURES

(Continued)

# The Star Alignment Device



Our new patented feature, the Star Lock Lever Alignment Device, is one of the greatest improvements ever made in cow stall construction. Simple and practical. Just raise the lever and move the stanchion backward or forward—five different points of adjustment in eleven inches. Stanchion adjusted forward for large cows, or backward for small cows. Cows are aligned at the gutter and kept clean. No tools required.

The adjustment is made instantly after the cow is in the stall. It takes no longer to make the adjustment than it does to lock the stanchion. Can be adjusted by an eight-year old boy. This feature exclusive with Star equipment. Stalls can be purchased and alignment added later if desired.



## EXCLUSIVE STAR FEATURES

(Continued)

# The Star Curb Clamp



By the use of this Curb Clamp, no anchors or templates of any kind are needed, nor is it necessary to wait for the equipment to arrive so that the pipes may be set in concrete.

When Star Curb Clamps are used, the concrete work can be done before the stalls are received. The floor and curb can be built cheaper and with less work—satisfactorily and smoothly.

When ready to place the equipment, set your stalls in place, drop the clamps over the curb and tighten the bolts. "Sixty seconds sets a stall." Simplest and most practical means of installing your equipment. Guaranteed to be safe and sanitary.

We furnish free, full instructions for the laying of the concrete floors, free barn plans, etc.

The Star Curb Clamp consists of two malleable jaws adjusted to the curb and securely bolted to the stall posts. The malleable casting which holds the steel posts is securely bolted to the jaws of the clamp.

# EXCLUSIVE STAR FEATURES

(Continued)

## ADJUSTMENT OF WIDTH

All of our stall arches are uniform in size and design, but may be used in stalls of any width. They are connected with each other by means of malleable castings of the three different sizes. The length of these malleables determine whether the stall is to be three feet, three feet three inches wide, or three feet six inches wide. Of course the stall can be furnished in other widths, but these are the preferred sizes in general use.

## ADJUSTABLE STALL ARMS

Special arms, adjustable in length, can be used so that stalls may be furnished any desired width down to a fraction of an inch.

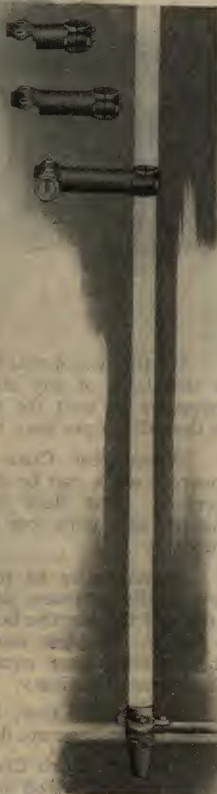


Fig. 508

# EXCLUSIVE STAR FEATURES

(Continued)

## ADJUSTABLE HANGINGS

Our stanchions are hung in the stall frames with the most approved double chain hangings, which may be adjusted and made as loose or as tight as you wish. See illustration below.

## COMFORT AND ECONOMY

The double chain hanging gives enough play back and forth so that the cow may get up or lie down in comfort. But there is no play from side to side; this prevents the cow from reaching over and stealing her neighbor's feed.

## FEED IS SAVED

The manner of hanging Star Stanchions as shown below, obviates the need of cut-outs in the curb. The Stanchion hangs low enough for comfort. These cut-outs are not only expensive to make, but allow the cow to work her feed back into the stall and waste it. A level curb prevents a waste—well worth considering at the present price of feed.

## PARTS EASILY REPLACED

You will see that our stanchions are in no way connected with the concrete. When the bolts or burrs holding them become worn they may be easily removed and replaced without the necessity of tearing out the curb. If you have ever torn out any concrete work you know what that means.

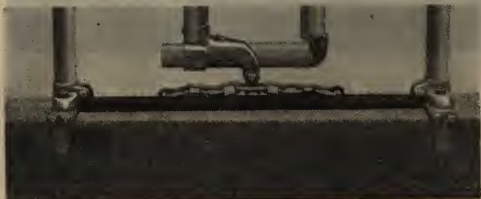


Fig. 511

Adjustable Noiseless Double Chain Hanging  
of Star Stanchions

# No. 10 Star Steel Stall

(UNIT SYSTEM)

Equipped with Giant Star Stanchion, Star Curb Clamps, Star Automatic Sure Stop and Star Alignment Device.

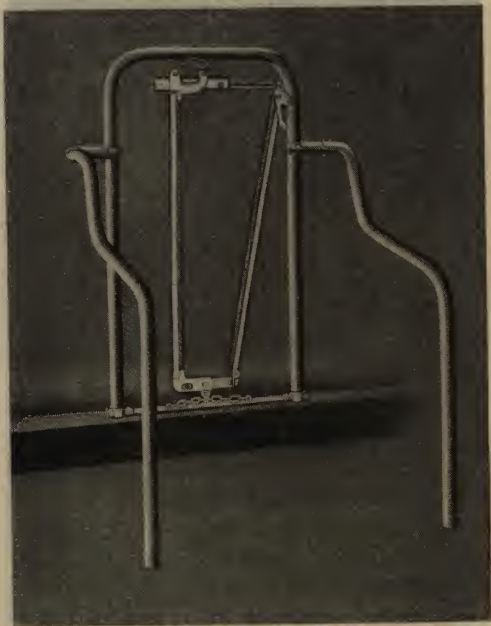


The Star Alignment Device, with which this stall is equipped, lines the cows up at the gutter. You can't buy cows all the same length, but the eleven-inch adjustment of the stanchion afforded by the Star Alignment Device solves the difficulty. An Alignment Device is valueless unless it can be operated instantly, and while the cow is in the stall. The old style Alignment Devices, in which adjustment was made by means of a variety of nuts and bolts, were valueless because they were never used.

# No. 13 Star Steel Stall

(UNIT SYSTEM)

Equipped with Giant Star Stanchion. Star Alignment Device, Star Automatic Sure Stop and Star Curb Clamps may be added, if desired.



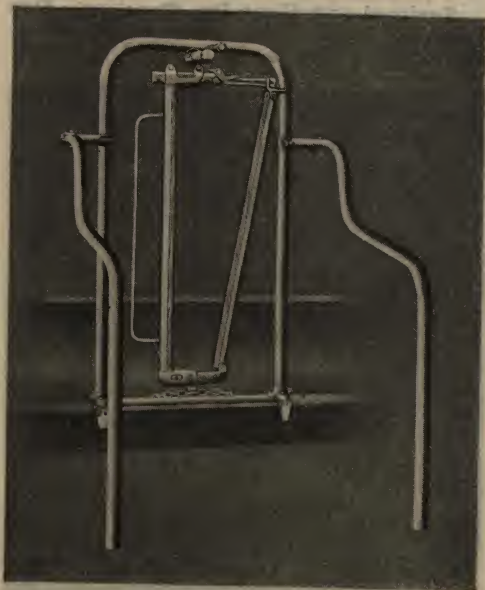
The Giant Star Stanchion, furnished with the above stall, is the biggest selling stanchion in the world. The wood lining is not hung on with screws; it is forced into the "U" bar, and doubly secured by screws which go one and one-quarter inches into the kiln-dried, hard maple.

The one-hand lock means that you don't have to set down your pail of milk to turn the cow loose. This stanchion can be adjusted in neck width to fit the largest bull or the smallest calf.



# No. 18 Star Steel Stall

(UNIT SYSTEM)



Equipped with No. 495 Boss Star Stanchion, Star Curb Clamps, Star Automatic Sure Stop and Star Alignment Device.

This stall is identical in construction with the No. 10 on page 16, but is equipped with the No. 495 Boss Star Adjustable Stanchion.

The wood lining, with which this stanchion is supplied, is rounded so that it is just as comfortable the first time the cow puts her head through as after years of use.

The lock on this stanchion is simple and durable. It cannot be opened by accident.



# No. 16 Star Steel Stall

(UNIT SYSTEM)

Equipped with No. 999 Star Tubular Steel Stanchion.

The Star Alignment Device and Star Curb Clamps may be added if desired.



The No. 999 Star Tubular Steel Stanchion, with which this stall is equipped, is the strongest and most satisfactory stanchion of its type on the market. Two important features of a stanchion to consider are the lock and the hinge.

Slam the movable bar on the stanchion into place and it is locked and can't be opened by accident. The hinge on this stanchion is built of steel, not iron. It is unbreakable.

# No. 17 Star Steel Stall

(UNIT SYSTEM)

Equipped with No. 452 Star Adjustable Wood Stanchion.

The Star Alignment Device and Star Curb Clamps may be added if desired.



The No. 452 Adjustable Wood Stanchion, with which this stall is equipped, combines all the advantages of a wood stanchion with the added adjustable feature.

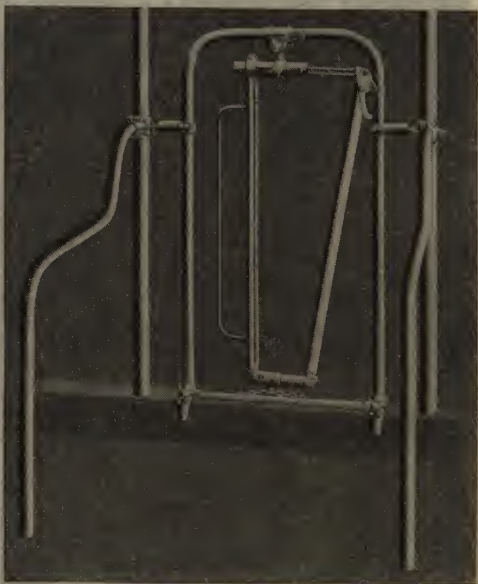
The latch is made of a single piece of malleable iron, sliding between two steel side plates. Easy to operate. Cow proof.

This stanchion is adjustable in neck width from  $4\frac{1}{2}$  to  $8\frac{1}{2}$  inches.

# No. 20 Star Steel Stall

(UNIT SYSTEM)

Equipped with Giant Star Stanchion, Star Curb Clamps, Star Automatic Sure Stop, Star Alignment Device.



The No. 20 Stall is identical in construction with the No. 10 Stall shown on page 18, with the exception that the arms furnished with the stall are built to clamp to columns of any size in the stall row.

Stalls corresponding to Nos. 10 to 18, inclusive, are furnished with similar arms to attach to columns of any diameter in the stall row.

Star Steel Columns are fully illustrated and described on page 34.

# There Are No Misfits In Star Adjustable Stanchions



Above is shown the Giant Star Stanchion adjusted to fit a calf and a bull. Other Star Stanchions may be adjusted.

# Giant Star Stanchion No. 486

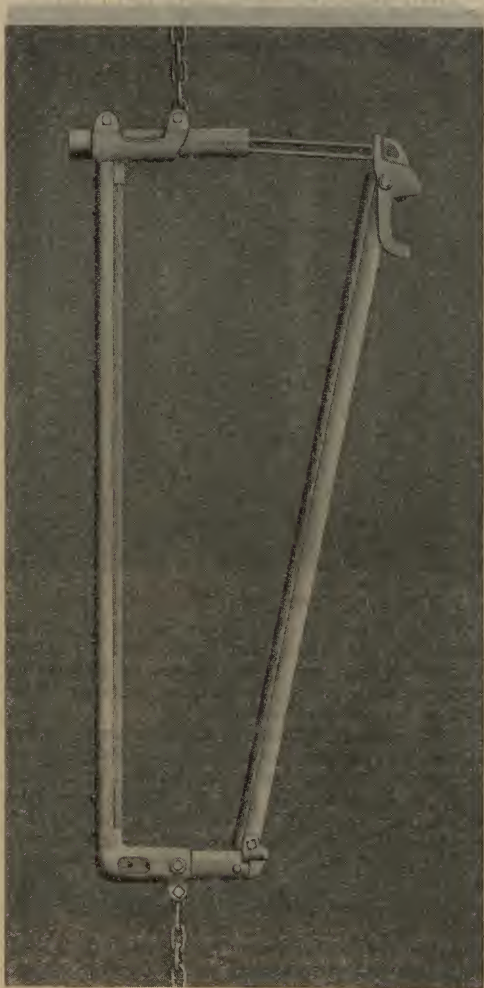


Fig. 510. The Giant Stanchion Lock

No description of mere words could do justice to the Giant Star Stanchion. It is the perfection that has been the aim of all makers and embodies several distinct advantages to be had in no other stanchion.

The Giant Stanchion Lock is an exclusive feature. The stanchion always locks perfectly and may be opened with one hand. You don't have to set down the pail of milk to turn the cow loose. The lock is fitted with a guide which connects the ends of the uprights. This insures perfect operation of the lock, even after years of wear. Our "U" clamp fits the side of the stall frame and holds the stanchion in place when open. Just by loosening two set screws the Giant Stanchion may be adjusted to a bull or a calf without taking it out of the stall frame. (See page 22).

# Giant Star Stanchion





# Giant Star Stanchion

The accompanying cut shows a cross section of the upright. The U-bars are of extra quality steel lined with hard maple. This maple is thoroughly kiln-dried. When we say thoroughly, we mean thoroughly—in the Star Way. The lining is cut by the latest improved machinery and imbedded in this bar by mechanical force. It is impossible to loosen this wood when once applied. It swells a little when exposed to the moisture in the stable; this wedges it in for keeps. It can't possibly be crowded off and presents a smooth surface to the cow's neck.

By making them in large quantities we save on raw material and labor. We are thus able to offer this stanchion with all its advantages, unquestioned strength, adjustability, "grown-on-to-it" wood lining, guided lock and our guarantee of satisfaction at a fair price.

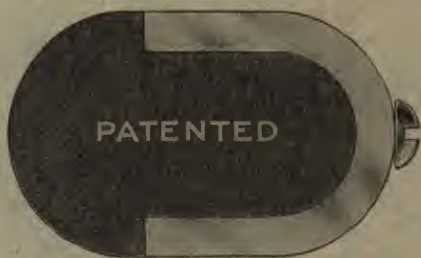


Fig. 537. Cross Section of Giant Star Stanchion  
Showing Wood Lining

"We especially appreciate the practical wood linings furnished with these stanchions; have had absolutely no trouble on account of the wood linings becoming loose as was true with linings furnished with other stanchions we have tried out.

"We recommend the 'Giant Star Stanchion' as being the most practical we have seen or used."

FOX & ARISEN,

Sycamore, Ill.

# The Boss Stanchion



Fig. 495

# The Boss Stanchion

## No. 495

The Boss Stanchion, shown on the opposite page, is exactly like the Giant Star Stanchion described on the preceding pages except that it has a different style of lock.

With this stanchion there is no need of squeezing large cows into stanchions that are too narrow for them, nor any temptation to rip off the wood linings to give cows necessary neck room.

This stanchion is instantly adjustable in neck width from  $5\frac{1}{2}$  inches to  $9\frac{1}{2}$  inches.

The wood lining is so applied that it cannot be loosened. (See illustration on page 25.)

A malleable loop forms the latch of this stanchion. This drops over a catch on the movable upright and is held in place by a strong oil-tempered spring.

The Boss Stanchion Lock is absolutely cow proof, but it can be easily opened or closed with one hand.

Figure No. 495 Boss Stanchion, finished in gray enamel, weight each, 25 lbs., chain or swivel hung.

# The Star Tubular Steel Stanchion

## No. 999



Fig. 999

The Star Tubular Steel Stanchion, Figure 999, illustrated herewith, meets the needs of those who wish a sanitary steel stanchion at a moderate price. This stanchion is made of 1 5-16 inch, high-carbon, seamless tubular steel. Its construction is simple, being made of very few parts.

The lock is a simple latch which is cow-proof, but is so designed it can be opened or closed with one hand.

The hinge at the bottom of the stanchion is exceptionally strong, being made of STEEL. It will stand the hardest kind of usage.

The hinge is so constructed that the stanchion will not open only as wide as is necessary.

When the stanchion is opened a crotch device, attached to the movable side of stanchion, engages the frame in which the stanchion is hung. This holds the stanchion in place and prevents it from twisting or turning sidewise.

The neck space is standard width.

Finished in gray enamel, thoroughly baked on.

STAR Tubular Steel Stanchion, Figure 999, weight each, 17 lbs. Furnished chain hung, as illustrated.

# Star Adjustable Wood Stanchion No. 452



Fig. 462

one piece of malleable iron and no springs. Furnished chain or swivel hung, as desired. Shipped chain hung unless otherwise specified.

Weight, 15 lbs.

Our Star Adjustable Wood Stanchion with malleable latch meets all the requirements of those desiring a perfect wood stanchion with adjustable features.

This stanchion embodies all the desirable features of the various wood stanchions now made. The uprights are of the best hardwood and are strong and durable. The cross pieces are of pressed steel and not of wood as is the case in other stanchions. These steel parts are securely bolted to the uprights and are, in addition, rigidly held in place by malleable braces. This construction renders it practically indestructible. Being adjustable in neck space from  $4\frac{1}{2}$  to  $7\frac{1}{2}$  inches, it can be used for calves and yearlings or for the largest cattle. The latch is automatic in operation,



# Star Steel Manger Divisions



Fig. 515

Star Manger Divisions are sheared out of a heavy piece of solid steel. Being made of one piece, they are practically indestructible. There is nothing to get out of order.

They accomplish the same purpose as the Star Mangers shown on the opposite page, in giving each cow an individual feed box.

The illustration above shows how they may be tilted up out of the way when the trough is to be cleaned. Furnished in gray enamel to match stalls. Weight, each, 14 lbs.



# Star Steel Stall Partitions

Steel Stall Partitions give each cow an individual space. There is no chance of crowding or trampling each other.

A double curve in the partition enables the cow to turn her head and back out of the stall easily.

Fig. 618

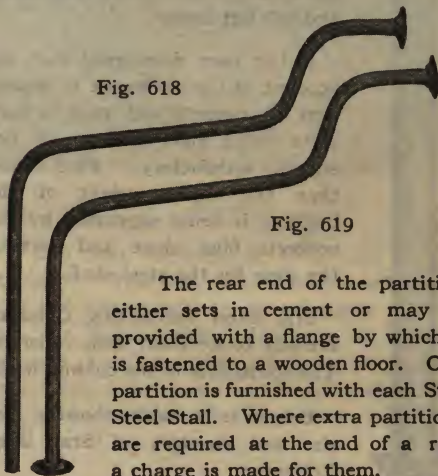


Fig. 619

The rear end of the partition either sets in cement or may be provided with a flange by which it is fastened to a wooden floor. One partition is furnished with each Star Steel Stall. Where extra partitions are required at the end of a row a charge is made for them.

Extra partition for Star Steel Stall, wood or cement floor.

Weight, 13 lbs.

Partitions for cement floor with flanges for wood uprights.

Weight, 14 lbs.

Partitions with flanges for wood floor and wood uprights.

Weight, 15 lbs.



# Star Steel Columns

Where steel columns are used to support the upper floor or loft of a barn, they are more satisfactory than wooden posts, because they take up less room, offer less obstruction to light and ventilation, are more easily cleaned and kept clean, and will last longer.

It has been discovered that, on account of the difference in expansion of concrete and steel, a concrete filled steel column is not entirely satisfactory. Part of the time the entire weight of the building is being supported by the concrete filler alone and part of the time by the steel shell.

Star Steel Supporting Columns are not to be filled with concrete. The strength is in the column itself.

Below is a table showing the size and strength of Star Steel Columns:

Fig. 626

Size	Load in tons		
	7 ft.	8 ft.	9 ft.
2 <sup>3</sup> / <sub>8</sub> -inch	4	3 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>
3-inch	5 <sup>1</sup> / <sub>2</sub>	5	4 <sup>3</sup> / <sub>4</sub>
4-inch	9 <sup>3</sup> / <sub>4</sub>	9 <sup>1</sup> / <sub>4</sub>	8 <sup>3</sup> / <sub>4</sub>
5-inch	14	13 <sup>1</sup> / <sub>2</sub>	13
6-inch	19 <sup>3</sup> / <sub>4</sub>	19 <sup>1</sup> / <sub>4</sub>	18 <sup>1</sup> / <sub>2</sub>

# Star Steel Bull Pen No. 630



Fig. 630

The first requirement of a bull pen is strength. The Star Pen is built accordingly. Top and bottom rails are of rectangular tubing; size,  $1\frac{1}{2} \times 2\frac{1}{2}$  inches. Uprights of  $1\frac{5}{8}$ -inch pipe are placed 6 inches apart on center, with ends inserted in the top and bottom rails. This does away entirely with clamp irons; leaves the rails free of all obstructions.

Double arched construction of gate prevents it from sagging. The gate hangs on offset hinges. When open, it swings back flat against the pen. The double pin Hall Safe pattern lock, locks automatically when the gate is slammed shut. It is unlocked by turning a wheel and cannot possibly be unlocked by accident.

Star Bull Pen,  $5\frac{1}{2}$  feet high; weight, per foot, 30 lbs.

# Star Steel Cow Pen No. 631



Fig. 631

The careful dairyman no longer allows his cows to pass through the calving period in the old rigid stanchion, risking the loss of the calf and injury to the cow. This is the time when the most care and attention is needed. Quarters should be clean and roomy.

Star Cow Pen is easily cleaned, disinfected and kept in sanitary condition. The construction is similar to that of the calf pen except that it is as high as the bull pen. It is assembled in panels and installed just like the calf pen. Weight per foot, 20 lbs.

Star cow pen may be provided with self-cleaning sanitary lifting manger. Weight, 60 lbs.

# Star Steel Calf Pen

## No. 632



Fig. 632

Many calves are lost each year which might easily be saved by proper care in clean, sanitary, comfortable surroundings. Star Calf Pen provides all these things. The top and bottom rails are of  $1\frac{5}{8}$ -inch square steel tubing. The up-rights ( $4\frac{1}{2}$  inches apart) are of  $1\frac{1}{16}$ -inch pipe; the ends of which are inserted in the top and bottom rails.

The sides of the pen are assembled in sections before shipping. The corner posts and gate arch are all that have to be imbedded in cement.

Stanchions for calf pen can be opened and closed one at a time or all at one time by the use of the continuous locking bar.

Feed guards prevent calves from forming the habit of sucking each other's ears. They may be raised to clean the manger trough.

The gate is fitted with automatic lock.

Weight, per foot, 15 lbs.

Finished in gray enamel.



# No. 813 Star Steel Young-Stock Pen

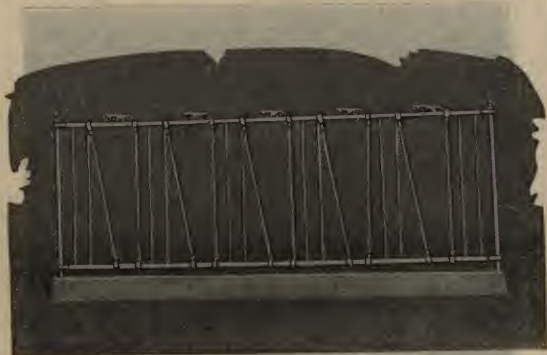


Fig. 813

No barn is properly equipped unless provision has been made for young stock.

STAR STEEL YOUNG-STOCK PEN was designed to take care of large calves, yearlings, or even full grown cows. The top and bottom rails are made of one and one-half-inch square steel tubing into which the ends of the upright bars are inserted. It has a smooth top and bottom railing, free from clamps and easy to keep clean.

Stanchions are spaced thirty inches apart unless otherwise desired. These stanchions are intended for young stock, but are heavy enough for full grown cows.

STAR STEEL YOUNG-STOCK PEN is five feet high, finished in gray enamel.



# Star Steel Hog Pen Construction



Fig. 726

## **Star Steel Hog Pen with Movable Front in Position to Allow Trough to be conveniently filled.**

The Star Steel Hog Pen is strong, sanitary and of few parts. It offers the least possible obstruction to light and ventilation. The top and bottom rails are of one and one-half inch O. D. square steel tubing. The corner posts and gate arches are of one and eleven-sixteenths inches O. D. pipe. The uprights are of one and one-eighth inch O. D. round steel tubing, regularly set four inches apart on center.

The ends of the uprights are inserted into the top and bottom rails, eliminating entirely the use of unsightly and unsanitary clamps, and leaving the rails as smooth as a banister.

Star Hog Pens, like Star Bull, Cow and Calf Pens, represent the most sanitary as well as the strongest pen construction yet offered, for the reason that there are the fewest possible places for dirt and germs to collect, and because the Star construction provides for the inter-linking of all parts in the most substantial manner possible.

Every panel or section is completely assembled at the factory. The corner posts and legs of the gate arch are all that need to be imbedded in the concrete.

# Star Sanitary Water Bowl

## COST RETURNED IN PROFIT

Nothing will return its cost in extra profit quicker than STAR Sanitary Water Bowls. They cut out the winter slump in the production of milk. To the man who sells milk, it means spring and summer quantity at winter prices, and for this reason a good, big extra profit.



A cow will drink more water if she can have it just as she wants it, especially in winter, when the tempered water given her in the stall is more relished than the icy water from the trough in the unsheltered barnyard. Some cows won't even drink warmed water, while fighting a blizzard in an open yard.

This bowl gives the cow a drink when she wants it. She takes a mouthful of hay or feed, and then a drink of water.

### STRICTLY SANITARY

The STAR Water Bowl avoids entirely the dangers common to other indoor water systems. In the old style systems, all bowls are connected with each other: if one animal is suffering from a disease of any kind, it is more than probable that the whole herd will become infected.

But the STAR Water Bowls are individual: there is no way in which water can run from one bowl into another—no danger of one bowl contaminating another.

### OPERATE UNDER ANY PRESSURE

These bowls are fitted with Fuller valves and operate under any kind of pressure. They may be connected with a direct pressure system or a storage tank may be used.

# The Star Sanitary Water Bowl Is Detachable

The Detachable Feature of the STAR Automatic Water Bowl makes it very handy to clean. To remove the bowl all that is necessary is to pull out the catch at the side of the valve chamber and lift off the bowl.

To replace the bowl, place the lugs at top and back of bowl between the ears located on both sides of the valve casing. Lower the bowl until you hear the catch click. Then the bowl is held in proper position.

Supply pipe may be inserted at either top or bottom of the valve chamber.

It is hard to conceive of any possible objection that might be raised against the STAR Automatic Water Bowl. All objectionable features retained in other bowls have been eliminated, and a number of new and important improvements added.

STAR Sanitary Water Bowls, weight, each, 17 pounds.

Finished in gray enamel, baked on.

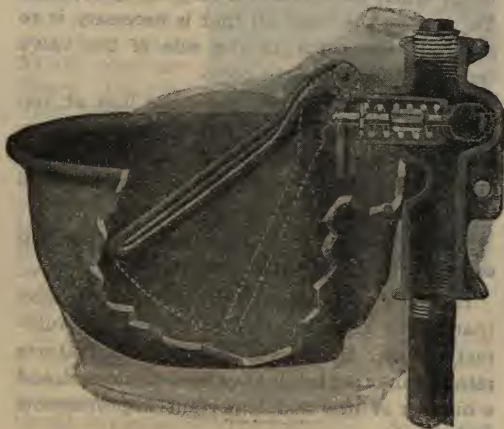
When ordering, be sure to specify whether bowls are to fasten to steel stalls or to wood.



Fig. 835

# Star Water Bowl

SLANTING VALVE LEVER  
INSURES CONTINUOUS OPERATION



The valve lever hangs into the STAR Bowl at an angle, so that silage or other feed, falling under the lever, cannot clog the bowl, or interfere with the operation of it. It's the best guarantee of a steady and uninterrupted water supply, and that the cows will have a drink whenever they want it.

The Slanting Valve Lever is easiest to operate, because instead of being pushed down by the point of the animal's nose, it is gently crowded to the back of the bowl by the underside of the animal's chin.

The Slanting Valve Lever takes up no room in the bottom of the bowl. It leaves it clear and free so that the cow has the entire depth of the bowl, with plenty of room to drink quietly and naturally, and without sucking up air.

# Star Water Bowls

No matter where the supply line is situated, the water can be carried directly into the STAR WATER BOWL. This saves a lot of fittings and the work of connecting extra joints.

The patented valve chamber permits the supply pipe to be connected from either above or below. The supply pipe is inserted at one end and a plug at the other.

The main supply pipe, for this reason, can be run along the ceiling—in back of the curb, in front of the curb—or along the top rail of the stalls as shown in the picture at the bottom of this page.

Another way is to place the main supply pipe below the concrete floor. Some claim this keeps the water cooler in hot weather.

*STAR Water Bowls can be easily installed in your barn* regardless of how it is arranged. You may figure that as long as there is money to be made by putting the bowls in at once, every day you do without the STAR WATER BOWLS means just that much loss.







## The Star Steel Bull Staff

Use a Star Steel Bull Staff to be protected against accidents when handling bulls.

The Star Steel Bull Staff can be operated from two places, either from the handle end, or very close up to the hook end. One method is very convenient when hooking the staff in the bull ring; the other is handy when releasing the staff.

This staff gives perfect control over the bull in the same manner, only more efficiently, than a Curb Bit handles a horse.

The Star Bull Staff as shown in Fig. 724, is five feet in length.

The hook and handle are constructed of the very best malleable iron, while the staff itself is made of one inch steel tubing.

Finished in gray enamel, thoroughly baked on.



Fig. 724

The weight is six pounds.



## Star Manger Drain



Fig. 637

This drain is intended to be used as an outlet for the water after the barn has been flushed.

The body is cast iron. The cap of aluminum is machined to make a close fitting joint.

Star Manger Drain complete, four inches in diameter weight, five and one-half pounds.

## Star Gray Stanchion Enamel

This enamel will protect metal from rust and barn conditions. It is exactly the same composition we use on Star Equipment, has been thoroughly tested and has been found to give lasting service.

Furnished in one-half pint, one pint, one quart and gallon cans.

Weight, per gallon, twelve pounds.



Fig. 759

## Star Sanitary Milk Stool



Fig. 72.5

It is sturdy and stout, secure in its footing, and so durable that it will last forever. Has a wooden seat, is reinforced around the edges by an electrically welded steel rim, and cannot warp. The legs are made of the very best malleable iron.

The Star Sanitary Milk Stool is finished in gray enamel.

The weight is 6 pounds.

# Star Chain Alley Gate

(Patented)



Fig. 739

Fits and closes any opening—a necessity in every dairy barn. Keeps the cattle where they belong. Saves time and patience. Can be used across doors and other openings where a steel gate could not be used. Simple, strong and effective. Can be attached to wood or steel posts.



Fig. 718



Fig. 738



Fig. 718

Fits any opening by merely lengthening or shortening the chain. Fitted with a simple, automatic lock. The Star Chain Alley Gate fills a long felt want in an efficient manner

Finished in gray enamel, thoroughly baked on. When ordering specify distance between posts and state whether for steel or wood. If steel posts, give size of posts. Weight of 3 ft. 6 in. gate, 8 lbs. Supplied by your dealer, or direct.

# Star Horse Stall



Fig. 760

**Star Horse Stall fitted with Automatic Hay Rack, Sanitary Feed Manger and Steel Stall Guard.**

The old way of feeding permitted great wastes of hay and unsanitary conditions where the hay was placed in an enclosed manger, or thrown upon the floor. The springs on the Star Automatic Feed Rack keep the hay compressed so that the horse does not waste it.

A complete description of our Sanitary Horse Stall Equipment may be found in our large catalog No. 75, which may be had upon request.

# Star Automatic Hay Racks



Fig. 749

Star Stall Front with Automatic Hay Rack locked open, as it appears from front feeding alley.



Fig. 750

Automatic Steel Hay Rack, fitted with Open Back, 30 inches high.

Write for list of various sizes.

## Star Steel Guards and Sanitary Feed Mangers



Fig. 742

### Star Wrought Steel Stall Guard, with Round End.

The illustration above allows free circulation of air, makes the stall light and at the same time keeps the animals apart. With this construction, the hames or other parts of the harness are not apt to catch.

Furnished in 5, 6, 7, 8, and 9-foot lengths.

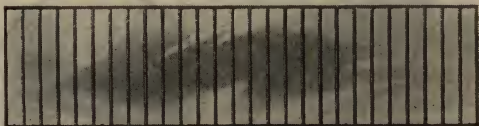


Fig. 743

### Star Wrought Steel Stall Guard, with Square End.

The guard illustrated above is suitable for use in connection with either single or box stalls.

Guards are two feet high, furnished in any lengths. Finished in black Japan.

## Sanitary Feed Manger



Fig. 755

The Sanitary Feed Manger illustrated above is constructed of 18-gauge, refined, cold rolled steel, heavily reinforced



# No. 822 Star "Push or Pull" Scraper



Fig. 822

The Star "Push or Pull" Scraper has a blade of heavy pressed steel, firmly bolted to the malleable iron frame which fastens it to the handle. It makes an ideal barn scraper as the litter in the cow bed can be pulled into the gutter, which is much easier then getting into the cow bed and pushing the litter out.

The above illustration shows the scraper in actual use as a snow scraper.

# The Star Cupola



Star Cupolas guarantee the efficiency of the ventilation system, and add to the attractiveness of any farm building.

# The Star Cupola

To provide fresh air for animals in the barn is fully as important as giving them their proper feed and water.

Air in a dairy barn rapidly becomes filled with poisonous gases that are exhaled by the animals or rise from the gutter.

Fresh air can be brought in only when the foul air is withdrawn and for this reason proper means of taking out the foul air should be provided in every barn.

The Star Cupola shown opposite, when placed at the top of an outtake flue, offers an effective way of taking poisoned air out of the barn and making room for fresh air to come in.

It is of galvanized steel, well made and correctly shaped.

Each Star Cupola has the greatest possible ventilating capacity for its size.

Furnished in the following sizes:

No.	Size of Flue	Cap.	Height	Weight
4	20 in.	10 cows	9 ft.	160 lbs.
3	24 in.	15 cows	11 ft.	180 lbs.
2	27 in.	18 cows	12 ft.	200 lbs.
1	30 in.	22 cows	13 ft.	220 lbs.
100	36 in.	32 cows	14 ft.	300 lbs.

There is no such a thing as a barn that can't be ventilated.

Our Barn Plan Department will assist you in working out a practical system of ventilation, the system best suited to your special needs.

# Star Litter Carrier

## No. 333

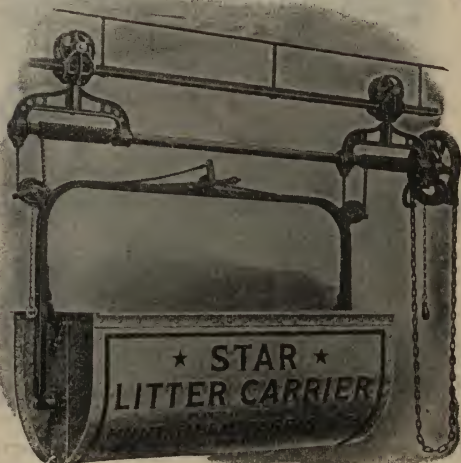


Fig. 333

The carrier pictured above is the fastest and easiest raising and lowering carrier made. The main shaft is supported at four points, all roller bearing, and the large drive wheel fitted with an endless chain is attached directly to it, no gearing or cogs to become worn or loose.

The large tracker wheels are roller bearing and run on a rigid track. It runs easily.

This, like all Star Carriers, has a rigid bail which holds the tub in shape and insures perfect working of the locks at both ends.

The tub is of heavy galvanized steel, reinforced with angle bars.

The tub can be unhooked from the conveyor and replaced with the feed tub shown on page 52.

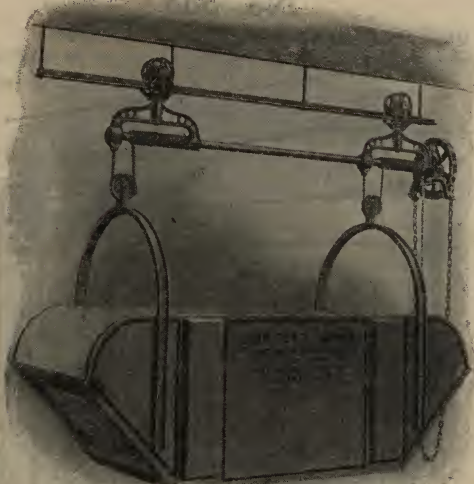
With No. 2, 6 bu. Tub, weight, 91 lbs.

With No. 4, 8 bu. Tub, weight, 93 lbs.

With No. 6, 10 bu. Tub, weight, 95 lbs.

With No. 8, 12 bu. Tub, weight, 130 lbs.

# Star Feed Carrier No. 334



Time has proven that a Feed Carrier is a necessity on any Dairy Stock Farm where more than six head of cattle are kept. Star Feed Carriers have, for a number of years, been a proven success in operating any dairy barns. A feed carrier operating on a track suspended from the ceiling is not affected by different floor levels or by obstructions in the feed alley. It is also convenient where the feed is to be carried any distance as the outside track can be installed so that the feed is easily delivered to the feeding racks or shovels. The feed tub is easily raised and lowered. It can be held at any desired height while feeding. Any boy large enough to do feeding, can operate a Star Feed Carrier easily and successfully. All Star Feed Carriers are subjected to five inspections before they finally leave the shipping room.

The tub can be unhooked from the conveyor and replaced in an instant with the litter tub shown on page 51.



# Switches and Curves

By using two and three-way switches and curves, Star Double Angle Steel Track can be made to conform to any arrangement.

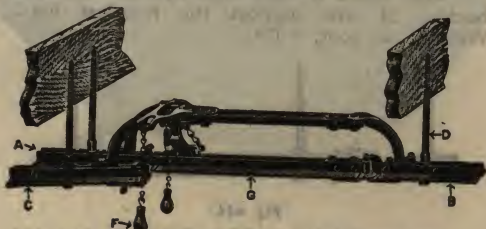


Fig. 337

Above illustration shows a two-way self-supporting switch. It is perfect in operation, being shifted to right or left by a simple pull of the chain.

It locks into position automatically and is fitted with automatic guards which prevent the carrier from running off the open switch.

Two-way Switch, weight 26 lbs., as illustrated.

Three-way Switch, similar to above, weight, 29 lbs.

Curves for Star Double Angle Steel Track are made on a 4-foot radius, each curve takes the place of eight feet of track. Weight, 12 lbs.



Fig. 361

## WALL BRACKET

Fig. 361 shows a bracket by which a ridge pole is supported at the end near the barn. This holds the end of the pole away so that it will not interfere with the working of the sliding door.

# Star Rigid Double Angle Steel Track No. 444

The rigid double angle track lends the same ease of operation to all Star Carriers.

Star track is rigid and will not bend or buckle. It will support the heaviest load. Weight, per foot, 2 lbs.



Fig. 444

By means of the lag screw hanger Fig. 414 the track may be adjusted to perfect level, even if the joists do not hang evenly. These hangers are made in several lengths.

Length	Clears	Per Dozen
10 $\frac{1}{4}$ -inch		5 lbs.
15 $\frac{1}{4}$ -inch	6-inch Beam	7 $\frac{1}{2}$ lbs.
17 $\frac{1}{4}$ -inch	8-inch Beam	9 lbs.
19 $\frac{1}{4}$ -inch	10-inch Beam	10 lbs.
21 $\frac{1}{4}$ -inch	12-inch Beam	11 lbs.



Figs. 87

126

339

414

Fig. 126 shows joist bracket used with Hanger Fig. 339.

Fig. 87 is our ridge pole hanger, also used with Hanger 339. It fits a 2-inch pole or joist. A nail in each slot holds it fast.

## Star Feed Truck No. 443



Fig. 443

Shipping weight, 225 lbs.

The Star Floor Feeding Truck is a necessity in every barn where an overhead feed carrier is not in use. It is lower in cost than a suspended carrier since track, hangers, and switches are not required. It can be moved to any place in the barn, and running directly under the feed door sheaves, can be used not only for carrying feed, but also bedding, baled shavings or any commodities to be delivered to any part of the barn. It is easily run over concrete or wood floor and can be turned in its own length.

The Star Feed Truck is built low to the floor with wheels properly placed to balance the load.

The Star Feed Truck is so built and reinforced, and finished that it will not work loose, or pull to pieces under the hardest usage. No points for practicability and durability have been overlooked. A hard wood frame holds it together and extends the full length of the bottom with an extra long center-piece reinforcing the steel bottom of the tub

# Star Ridg-Rod Litter Carrier No. 592

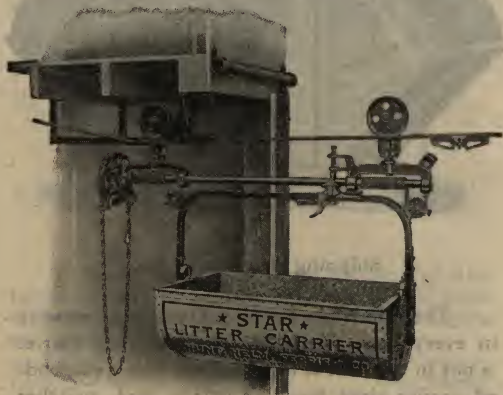


Fig. 592

Star Ridg-Rod Litter Carrier combines the returning feature of the rod track with the adaptability of the rigid track.

This carrier can be installed in any barn.

A shove at the door sends the carrier out; it dumps at the proper point and returns automatically.

Otherwise above carrier is just like Fig. 333 shown on page 51.

This carrier and the one shown opposite are the only litter carriers operating on a combination of rigid track inside the barn and rod track outside where the track lines up perfectly. The tracks are joined in such a way that there is no offset at the joint. This gives a straight run from inside the barn to the dump, and enables the operator to give the carrier enough momentum to send it out to the trip block where it will dump and return automatically to the barn door.

Weight, 150 lbs.

# Star Ridg-Rod Litter Carrier No. 693

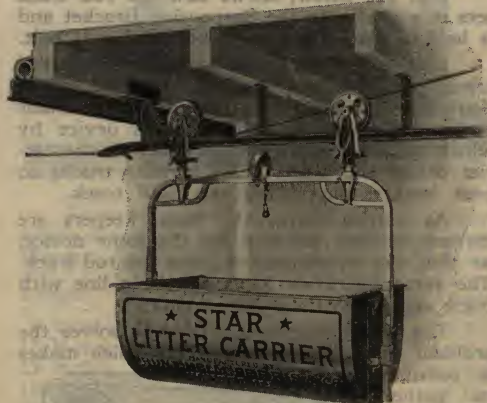


Fig. 693

The above litter carrier operates on rigid track inside the barn and rod track outside. It may be given a shove at the barn door and will run out, dump and return automatically to the door.

Spring keepers, which prevent wheels from jumping the rod track, are thrown down upon entering the barn, allowing the carrier to pass the hangers supporting the rigid track.

The tub of this carrier measures 26 inches by 41 inches, and is 14 inches deep.

Carrier complete weighs 110 lbs.



## Giant Suspension Bracket No. 594

The secret of the successful operation of the Ridg Rod Carrier lies in the Giant Suspension Bracket and Coupling.

Fig. 595 below, shows how the rod track sets in a groove in the Suspension Bracket and is held in place by a hook bolt and a U bolt.

One end of the coupling fits over the rod track, the other end fits into the end of the double oval track like a splice. To the Giant Suspension Bracket is attached a device by which the keepers are thrown down as the carrier enters the barn. This permits trucks to pass hangers supporting the rigid track.

As carrier leaves the barn, keepers are thrown up into position by the same device, so that the wheels cannot jump the rod track. The same operation locks wheels in line with track and keeps them from binding.

The Giant Suspension Bracket solves the problem of a smooth connection which makes it possible to gather head way with a loaded carrier before it is given the final shove to the dump.

Weight, 14 lbs.



Fig. 595

## Star Double Oval Track No. 593

Fig. 593 shows Star Double Oval Track. This is furnished in sections 10 feet long, complete with splices.

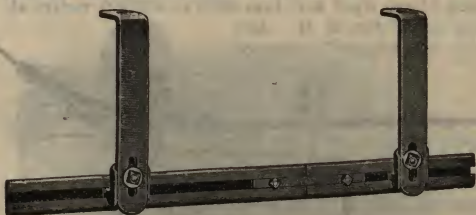


Fig. 593

Illustration above, Fig. 593, shows hangers which fasten the track to the ceiling or joists. Hangers furnished in five lengths, as follows:

Length	Clears	Per Dozen
9 inches		14 lbs.
15 inches	6-inch Beam	20 lbs.
17 inches	8-inch Beam	23 lbs.
19 inches	10-inch Beam	26 lbs.
21 inches	12-inch Beam	29 lbs.

## STAR RIDG-ROD SWITCH No. 597

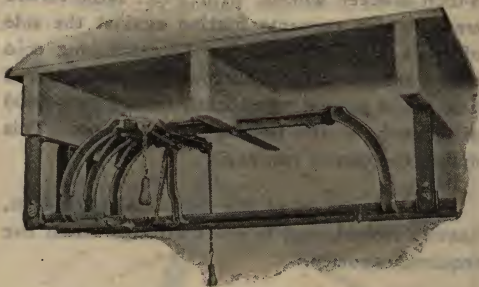
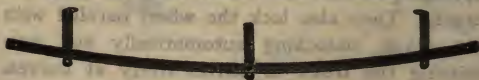


Fig. 597

## STAR RIDG-ROD CURVE No. 596



# Star Rod Track Carrier No. 405



Fig. 405

All Star Carriers for rod track are run on 8-inch tracker wheels, with wide, lathe-turned tread, which prevents friction against the side of track. Each wheel has 12 extra long cold rolled steel bearings, surrounding a shouldered axle pin of special rolled steel, turned to 1-1,000 of an inch, so the bearing is frictionless. This makes the carrier run easily.

The frame is of the best malleable iron, heavily ribbed, and is much stronger than the required capacity.

The malleable keepers held in place by steel springs prevent the wheels from jumping the track. They also lock the wheel parallel with the track, unlocking automatically and permitting the truck to swivel freely at curves.

# Rod Track Equipment

The rod track we furnish with our carriers is either 000000 or 0000 and is a high grade steel rod. It is cut to fit and looped. Weight per 100 feet, 40 lbs.



Fig. 421

Limited space prevents accurate description of our carrier equipment. The illustrations on this page give but a glimpse of two or three of its features.

Track is fastened with tension bolts at each end and an anchor rod, as shown below, holds the outside end firmly. This rod is fitted with a turnbuckle so that on each line of track there are three places where the tension may be adjusted.



Fig. 424

Weight of tension bolts, each,  $6\frac{1}{2}$  lbs.

Weight of anchor rod, each, 10 lbs.

Weight of anchor rod with turnbuckle, 35 lbs.

Weight of switches or curves, each, 25 lbs.

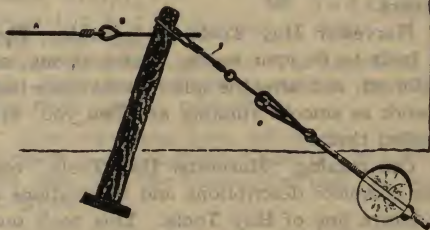


Fig. 353

# Harvester Hay Carriers

For Steel, Wood or Cable Track



Fig. 493

## Fork Carrier

The big, strong carrier shown above is only one of a complete line of Fork and Sling Hay Carriers.

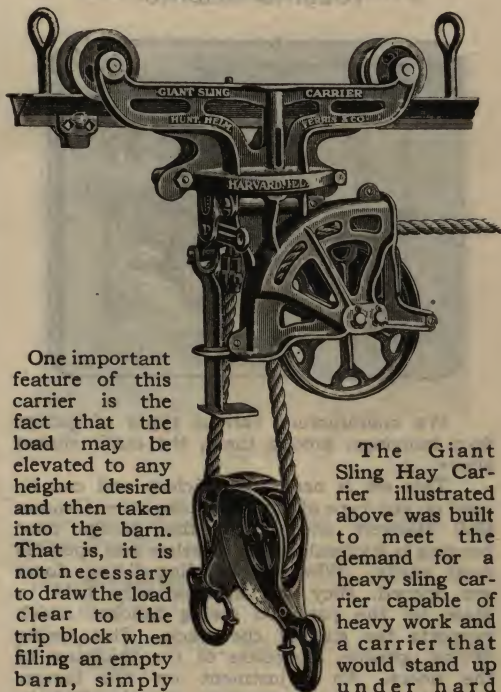
Harvester Hay Tools are reliable. They are built to fit your needs. Extra strong, are reinforced, and after the idle months come back to work as smooth running as when you first installed them.

Our catalog, "Harvester Hay Tools," contains complete descriptions and illustrations of our entire line of Hay Tools. This book may had upon request.



# Harvester Hay Carriers

For Steel, Wood or Cable Track



One important feature of this carrier is the fact that the load may be elevated to any height desired and then taken into the barn. That is, it is not necessary to draw the load clear to the trip block when filling an empty barn, simply clear the hay door and then

pull the load into the barn. The automatic rope grip holds the load just as soon as the pull on the draft rope is released.

The rope grip with which this carrier is supplied is so constructed that it will not wear the rope. and the heavier the load the harder it grips.

Sling pulleys can also be furnished with this carrier for use with end trip slings, if desired.

Fig. 687

The Giant Sling Hay Carrier illustrated above was built to meet the demand for a heavy sling carrier capable of heavy work and a carrier that would stand up under hard usage.

# Cannon Ball Combination Garage Sets

FOLDING—SLIDING



We manufacture various types of garage door hangings; among them, the outfit shown above.

This set is neat and efficient and can be used on any type of garage. Like other Cannon Ball Hangers and Track, this garage door hanging is frictionless and noiseless and operates most easily. When the folding-sliding doors are opened, they are automatically held in place by the patented spring bracket which supports the end of the track. This spring device operates regardless of the thickness of the doors. An adjustment on the hanger prevents the doors sagging. As the folding-sliding doors fold inside, they take up a minimum amount of space and operate in a small circumference. If it is undesirable to operate the whole front, a convenient entrance is obtained by means of a single swinging door. By the use of this outfit the opening is made weather-tight. These sets No. 800 are packed complete ready to install.

Write for our "Better Door Hanger" catalog which completely describes and illustrates our Garage Hangings.

## No. 900 Combination Garage Set, Rolling—Folding



Fig. 985

The features of the No. 900 Set which will appeal to you:

1. Fits any opening.
2. Easy to install.
3. An adjustable hanger to take care of sagging.
4. A weather-proof entrance.
5. Doors fold inside, requiring minimum space.
6. Neat in appearance and efficient in service.

The private entrance to the right folds back against the wall. The two rolling folding doors roll back and fold against the wall where they occupy only the space required by their own thickness. The track being blocked out holds the doors securely in place, but a slight pull closes them.

# Cannon Ball Track and Hangers

## for Barns or Garages



Fig. 387

Illustrates the  
Standard Cannon  
Ball Door Hanger  
and Track.

Cannon Ball Track and Hangers have been known to the trade for a good many years.

The Hangers are made in both single wheel and tandem types. Specially designed steel ball wheels, light running, and noiseless, are mounted on steel and malleable frames. These frames with the wheels are completely enclosed in a tubular track, nothing exposed. The hangers are frictionless, flexible, built with long roller bearings, Non-adjustable or Adjustable, as required.

Our catalog No. 75 completely describes and illustrates our entire line of Hangers.

This book will be gladly furnished upon request.

# Cannon Ball Track and Hangers

## for Barns and Garages

(Continued)



Fig. 387

Cannon Ball Track is recognized as the most popular door track on the market. Its shape makes it self cleaning. No dirt can possibly lodge in the track and prevent the doors working properly. It is weather proof and bird proof.



Fig. 682



Fig. 680

The Center Bracket, Fig. 682, is used to connect two lengths of track. The track itself is supported by lag screws sliding through holes drilled in the center brackets.

The track is prevented from turning by rivets in the center bracket, which slip into a notch cut in every length of Cannon Ball Track.

If desired, Cannon Ball Track can be furnished in 4, 6 and 8 foot lengths. With longer lengths than 3 foot, Intermediate or sliding Brackets are used as additional support. The Intermediate Bracket is made so that it can be slid along the track and placed at any point desired.

In ordering Cannon Ball Track, specify one Center Bracket for each length of track, one Intermediate Bracket for each four or six foot length, and two Intermediate Brackets for each eight foot length. Two End Brackets are required for each opening.



# Seal-Tite Cannon Ball Barn Door Track

Seal-Tite Cannon Ball Track illustrated on this and the opposite pages, combines all the advantages of Cannon Ball Track with the advantages of a storm shed over the top of the door.

As shown on this page, there is a solid connection between the track and the building which prevents rain, snow and sleet from getting in between the building and the track.

The lip or apron which extends down and outward from the lower side of the track effectively closes the space between the track and the door and prevents the elements from entering in.

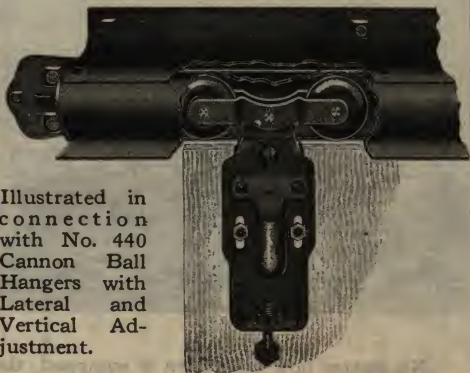
Seal Tite Track is perfectly round inside. The Cannon Ball Hangers which are used with it have steel ball wheels. These wheels have an even bearing on both sides of the slot in the bottom of the track so that they will not wear unevenly or cut out the bearings on one side. The track is lined up perfectly at the joints by means of a splice which is furnished with the track.

**Closed  
Between Building  
and Track**

**Closed Between  
Track and Door**

Sectional View of Seal-Tite Cannon Ball Track Showing tight-fitting shed above the door and the flange which prevents the wind and rain from blowing between door and track.

# Seal-Tite Cannon Ball Barn Door Track



Illustrated in  
connection  
with No. 440  
Cannon Ball  
Hangers with  
Lateral and  
Vertical Ad-  
justment.

Seal-Tite Cannon Ball Track can be used in connection with any of the regular Cannon Ball Hangers. The No. 440 Hanger illustrated above is made with an underslung tandem truck which slides evenly, noiselessly and without friction inside the track, which entirely surrounds it.

The roller bearings of the truck wheels are over an inch long. Years and years of service wears them only slightly and there is not the tendency to twist or pile up that is usually noticeable where roller bearings have been subject to a lot of wear.

The strap of the No. 440 Hanger illustrated above is so designed that the door can be set closer to the building or farther away from it, as desired, simply by turning the screw at the top of the strap.

After loosening the bolts which fasten the hanger to the door, a slight turn of the nut on the adjusting bolt at the bottom of the strap will raise or lower the door. This is a decided advantage, particularly where you want to have two doors meet perfectly in the middle.

Seal Tite Track is furnished in 3, 4, 6 and 8 foot lengths. The No. 680 End Bracket shown on page 67 should be used at each end of every installation—two for each opening,

# Free Barn Plans



No matter how your barn is equipped, the proper construction and arrangement are of great importance.

Nothing will ever be invented to replace good, sound judgment. We have the highest regard for the judgment of our dairymen friends which is backed by thoughtful study and years of rubbing up against the facts.

It is not our purpose to advance the ideas of any one man but to help each man develop his own ideas so as to get the best possible arrangement for his barn. We have accumulated the best ideas of thousands of dairymen with whom we have come in touch in our thirty years' experience.

These ideas are put into practical form by experts familiar with every detail of barn construction.

These experts will make a plan for you—one that fits your own individual needs and embodies your own ideas.

Answer the questions on page 71. Tear it out and return it to us. It will cost you nothing and place you under no obligation to us.

Do you expect to build or remodel—which?.....

When?.....

How many cows do you own?.....

How many stalls will you need?.....

How many pens will you need for bulls?.....

Cows?.....

Calves?.....

Do you want the cows to face the center or the outside of the barn?.....

### CHECK ITEMS IN

WHICH YOU ARE INTERESTED.

☐ Stalls and Stanchions

☐ Litter and Feed Carriers

☐ Door Hangers

☐ Hay Tools

☐ Water Bowls

Name.....

Town.....

This 300- page book

sent free if

you fill out

the above blanks and return this page to us.

R. F. D.....

(See other side).



Please give on this plan the inside length and width of your barn, showing where Litter Carriers and Stalls are desired.

**T. R. GREEN**  
**DAIRY BARN SPECIALIST**  
**2816 GILBERT AVE.,**  
**TEL. W'DBR'N. 836-R. OLN, O.**

Fill out blank on opposite side, tear out and mail to us and we will send you our big 300-page catalog showing our full line of barn equipment and barn plans.



